

Claims:

1. A method for removing gas from comminuted lignocellulose material, wherein the material composed in a gravitationally lowering column is heated to a degasification temperature with steam supplied essentially to traverse the column, **characterized** in that the heated material is directed to advance as a composed bed through a gas removal section, that the temperature of the material bed is maintained at the degasification temperature in said gas removal section by introducing steam beneath the material bed, and that gas is removed from the top of the material bed.
5
2. A method in accordance with claim 1, **characterized** in that material is heated to a temperature of 80°C to 160°C for degasification.
10
3. A method in accordance with claim 2, **characterized** in that the material is heated to a temperature of 100°C to 130°C for degasification.
4. A method in accordance with claim 1, **characterized** in that the material is heated to the degasification temperature in a time ranging from 20 to 180 seconds.
15
5. A method in accordance with claim 1, **characterized** in that the material is retained as said composed bed in the essentially horizontal advancing movement ranging from 10 to 65 minutes.
6. A method in accordance with claim 1, **characterized** in that the condensate formed in the heating is removed.
20
7. A method in accordance with claim 3, **characterized** in that the material, subsequent to the heating, is maintained as said composed bed in a pressure essentially corresponding to the steam pressure at the prevailing temperature.
8. An apparatus for implementing the method of claim 1, the apparatus consisting of an upright silo (2) having an upper part and a lower part and an intermediate part therebetween, the upper part being furnished with means to receive the material to be treated, a longitudinal tubular vessel (1) positioned
25

essentially horizontally and connected to the lower part of the silo for receiving the material from the silo, and conveying means (3) in the tubular vessel for transportation the material through said vessel, **characterized** in that the silo within the intermediate part is furnished with means (5,6,7,8,9) for supplying fluid having an elevated temperature to the material essentially transversally to the advancing direction of the material in the silo.

- 5 9. An apparatus in accordance with claim 8, **characterized** in that said means for supplying fluid having an elevated temperature are means for supplying steam.
- 10 10. An apparatus in accordance with claim 9, **characterized** in the means for supplying fluid having an elevated temperature are means for supplying the steam totally over a section of the intermediate part.
- 15 11. An apparatus in accordance with claim 8, **characterized** in the conveying means (3) consist of separate parallel lamellae (31) in lower part of the tubular vessel (1), positioned in longitudinal direction of the said vessel and extending essentially over the length of said vessel, each lamella having a driving means for moving it in the longitudinal direction for a certain length back and forth.
- 20 12. An apparatus in accordance with claim 11, **characterized** in the tubular vessel (1) is furnished with inlets (20) for supplying steam beneath the lamellae (31), with outlets (18) for removing gas from the upper part of the tubular vessel, and with outlets (19) for removing liquid from the lower part of the tubular vessel.